

NORTHEAST ENERGY INFRASTRUCTURE CONFERENCE

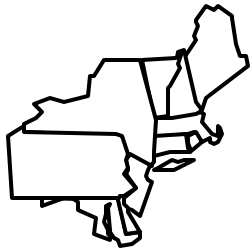
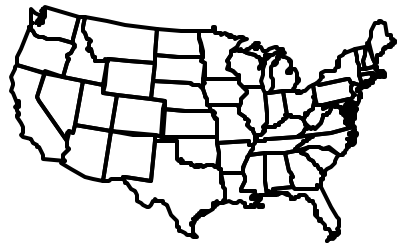


JANUARY 31, 2002

NEW YORK CITY

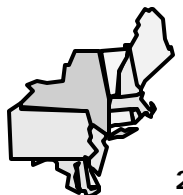
US/NORTHEAST COMPARISON

1990 and 1999

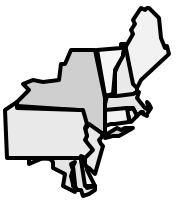


Population	GDP	Energy Use
9.6%	63.1%	13.9%
2.4%	53.4%	10.3%
58 million	2.3 trillion	16.1 quads

Source: US Census Bureau, Bureau of Economic Analysis, EIA

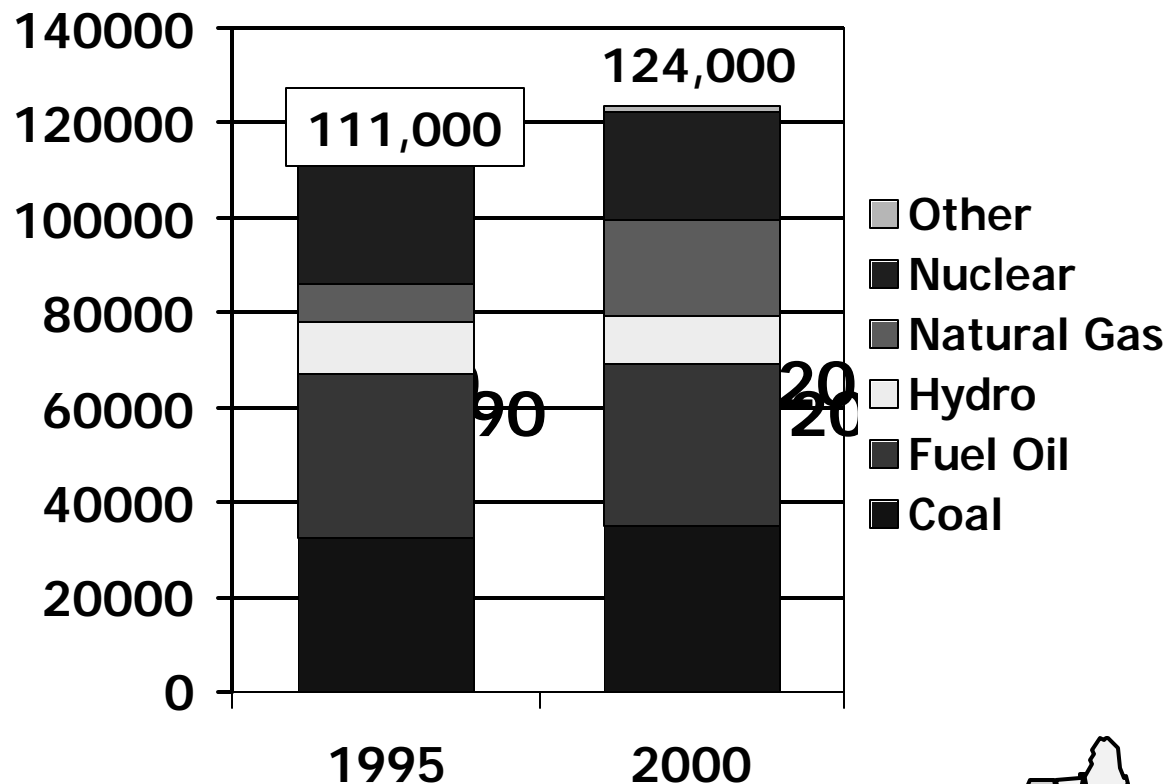


ELECTRIC INFRASTRUCTURE

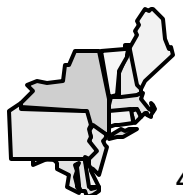


Northeast Generation Capacity (in MW)

- Northeast generation capacity increased by 11.6% between 1995 and 2000

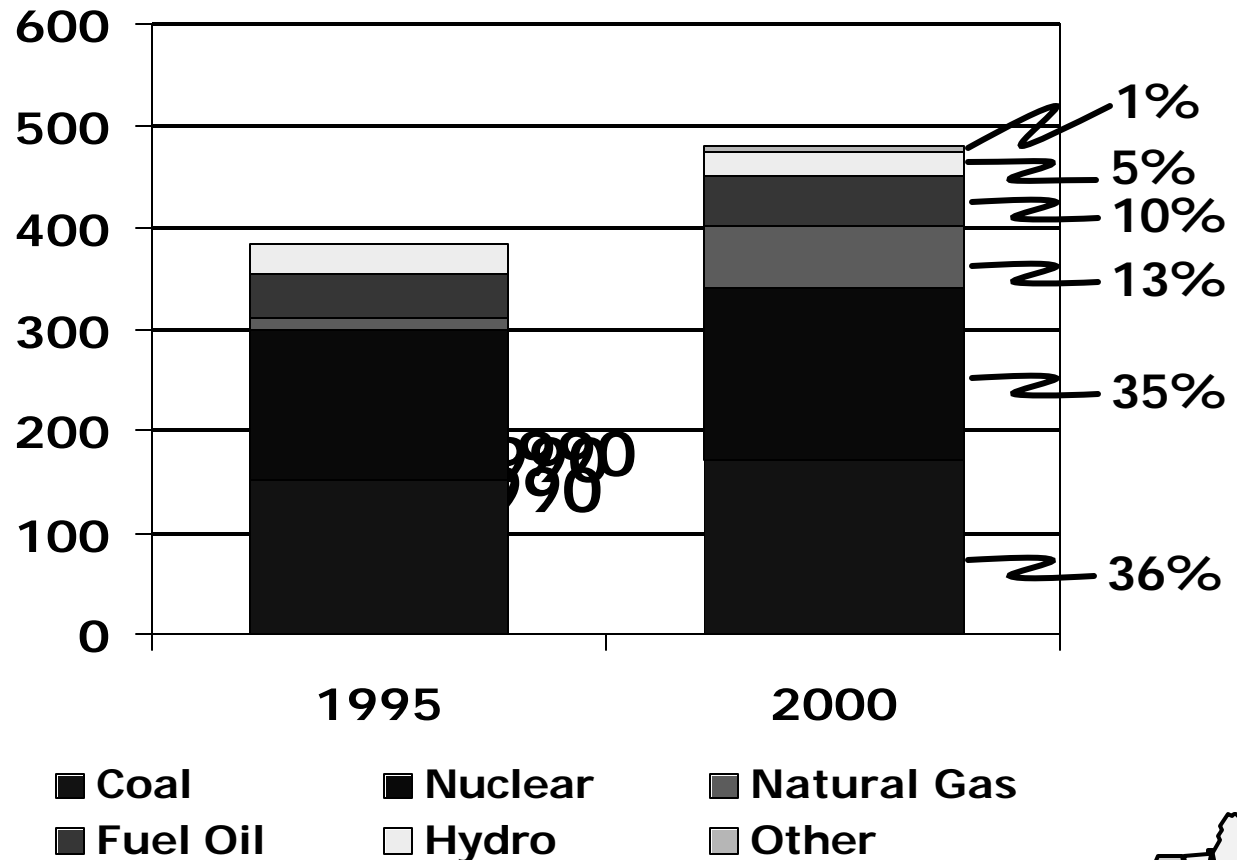


Source: RDI POWERdat

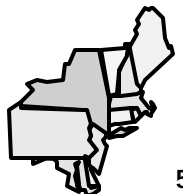


Northeast Generation Output (in TWh)

- Northeast generation output increased by 25.2% between 1995 and 2000, to 480 TWh



Source: RDI POWERdat

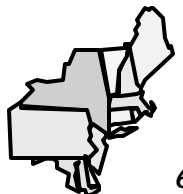


Northeast New Generation Capacity

- Generation capacity in Northeast may increase by over 33,000 MW by the end of 2004 – a 26% increase.
 - 12,000 MW are under construction.
 - 9,000 MW are in the advanced development stage.
 - 12,000 MW are in the early development stage
- Virtually all of this capacity is gas-fired.

Sources: RDI POWERdat, System Version 3.1.0308 – 10/30/01, Data Version P3.1, Data Set Oct 01, RDI Modeled Production Costs-Ownership Based.

RDI NewGen. (File 8)



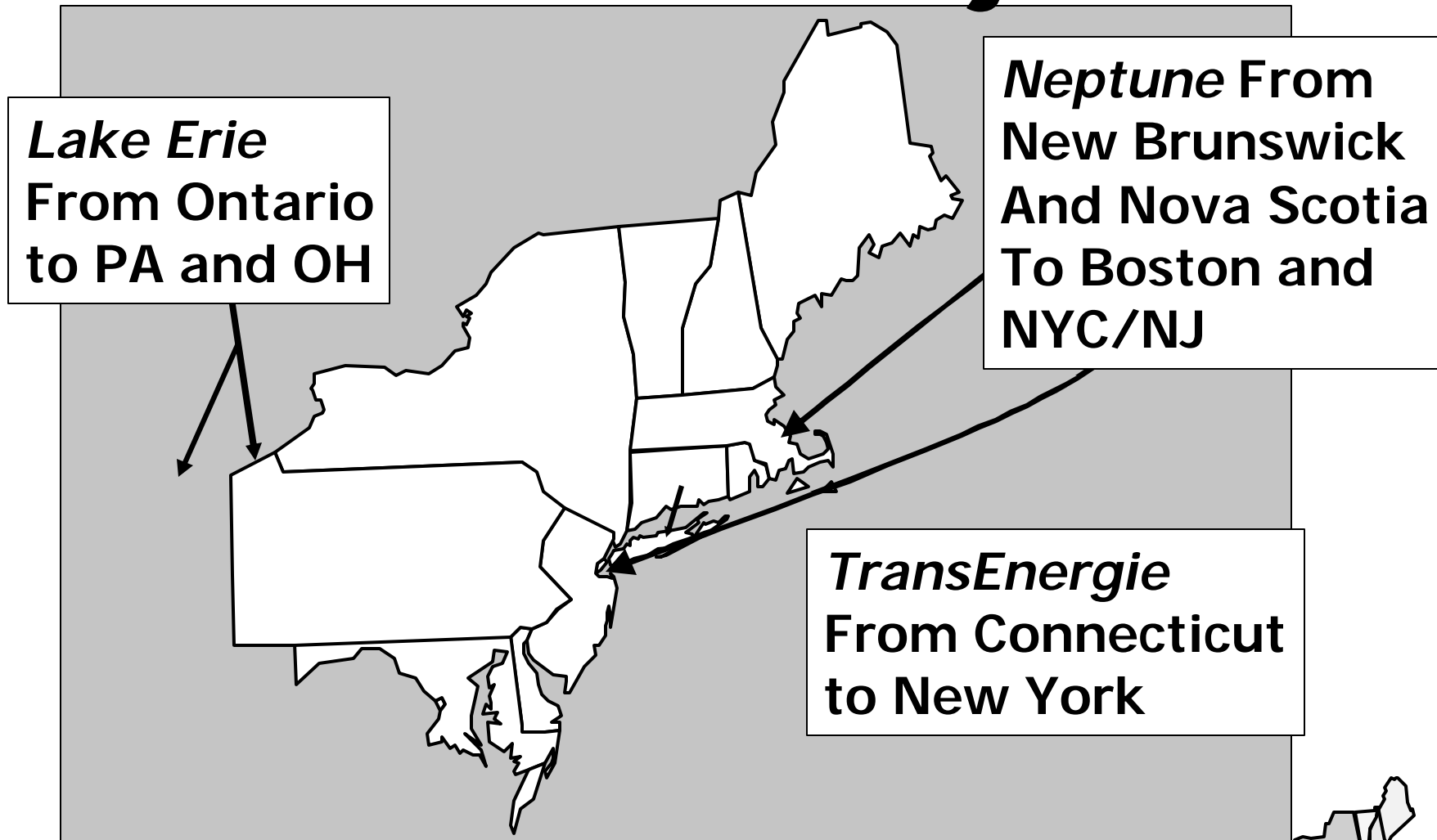
A bar chart comparing the number of miles for three NERC Subregions. The y-axis is labeled 'Miles' and ranges from 0 to 25,000 in increments of 5,000. The x-axis is labeled 'NERC Subregion'. The bars are light gray with black outlines. The values are displayed inside each bar.

NERC Subregion	Miles
New England Power Pool (NEPOOL)	13,536
New York Power Pool (NYPP)	17,740
PJM Interconnection (PJM)	21,983

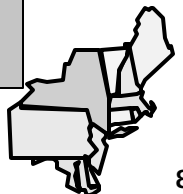
FERC **=====** **NORTHEAST ENERGY INFRASTRUCTURE CONFERENCE** **=====**



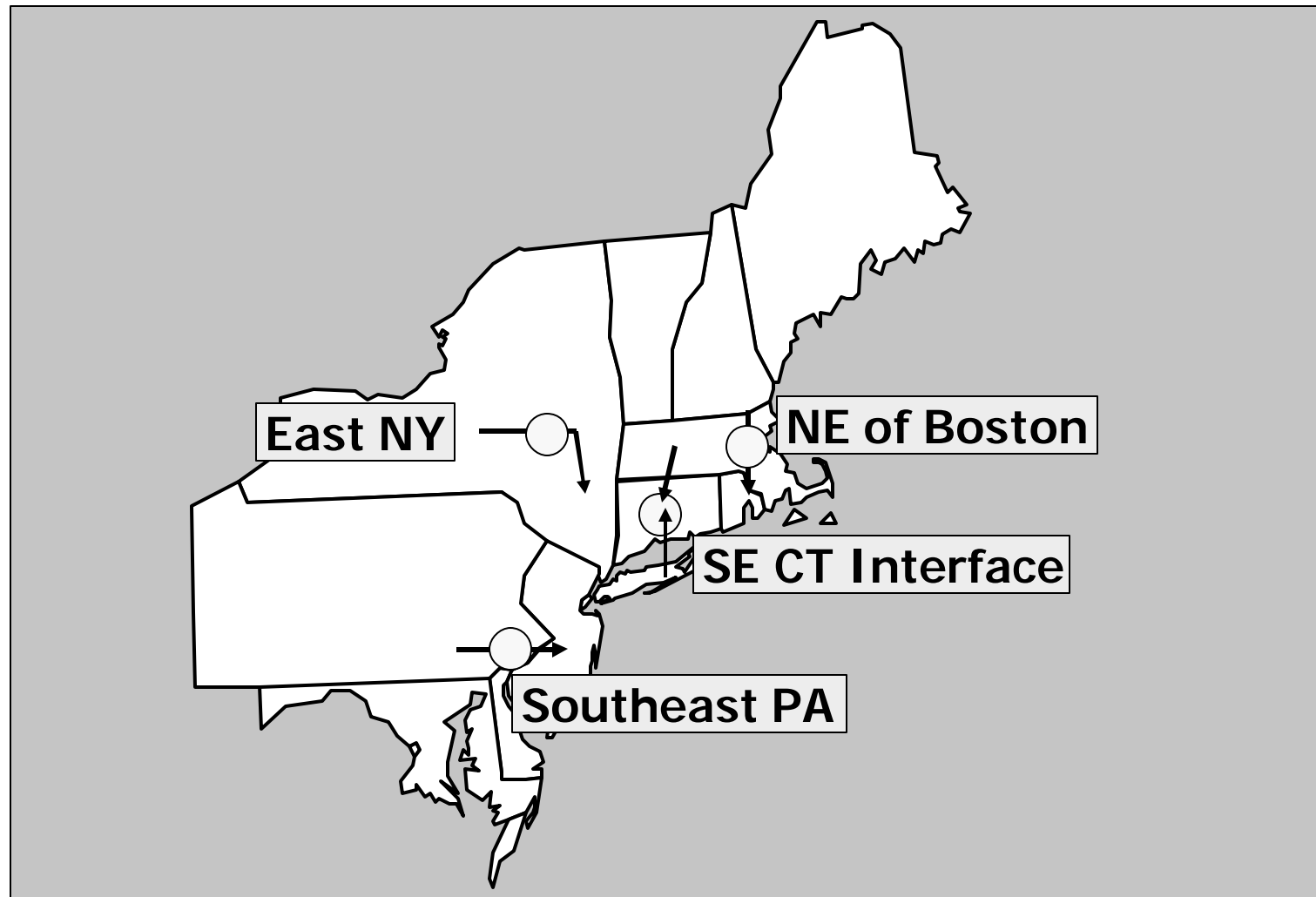
Proposed Northeast Merchant Transmission Projects



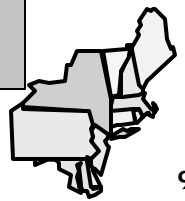
Source: www.neptunerts.com, www.lipower.org, www.lakeerielink.com, www.hydroone.com



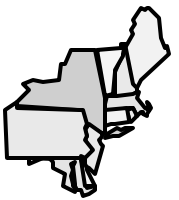
Major Transmission Constraints in the Northeast



Source: FERC

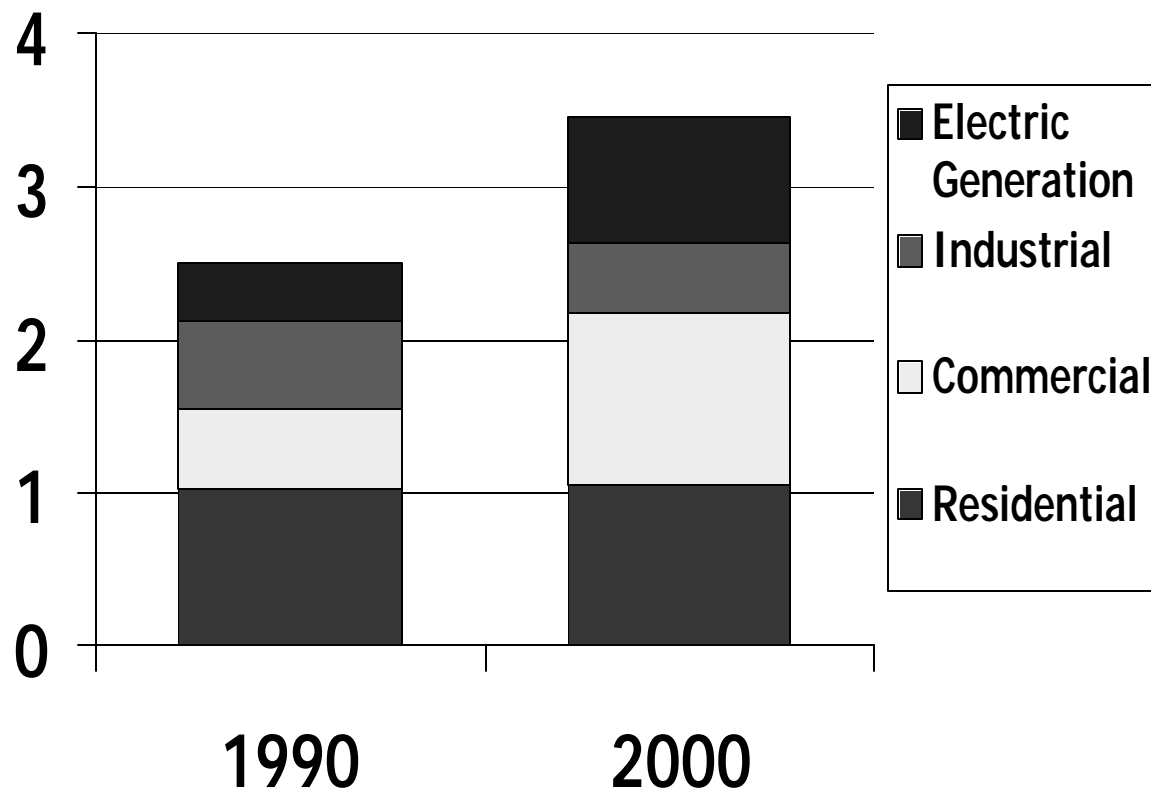


GAS INFRASTRUCTURE

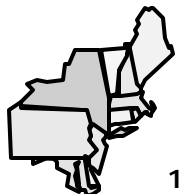


Gas Consumption in the Northeast (in Tcf)

- Gas consumption increased by over 35% between 1990 to 2000, to 3.4 Tcf.
- Gas consumption in 2000 was 16.6% of total US consumption

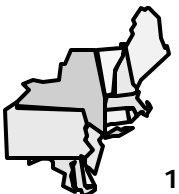


Source: EIA

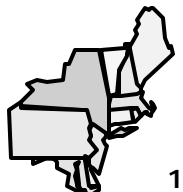
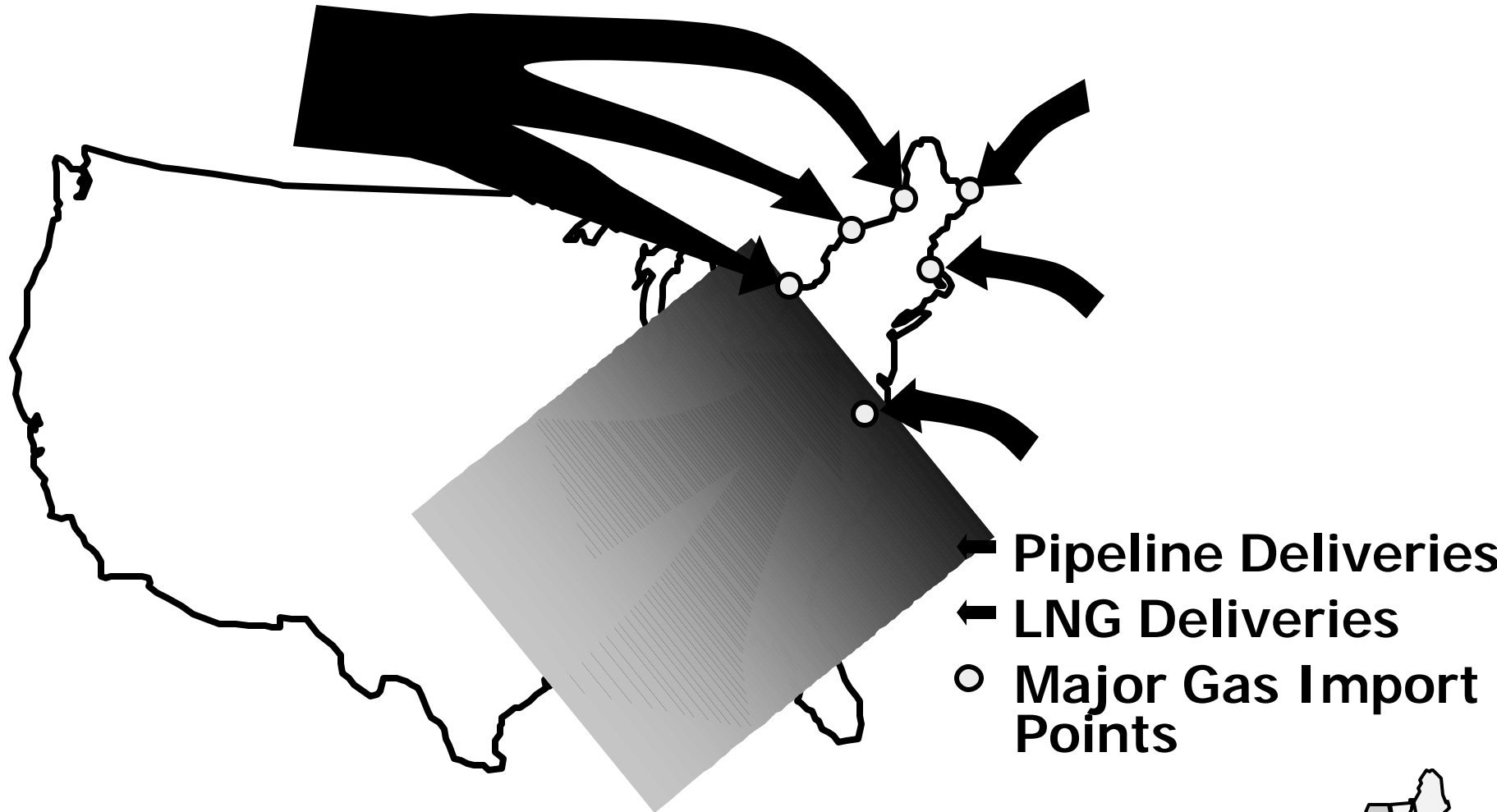


Existing Capacity

- There are 10 major US pipelines that serve the Northeast gas market.
- From 1990 to 2000, capacity to the Northeast grew from 10 Bcf per day to 13.3 Bcf per day - a 33% increase.
- About 75% of the capacity growth - 2.5 Bcf per day – delivers Canadian imports.



Natural Gas Supply Flows to the Northeast



Material on this page is consider **Non-Internet Public (NIP)**

You would like a copy of this slide, please contact:

Public Reference Room

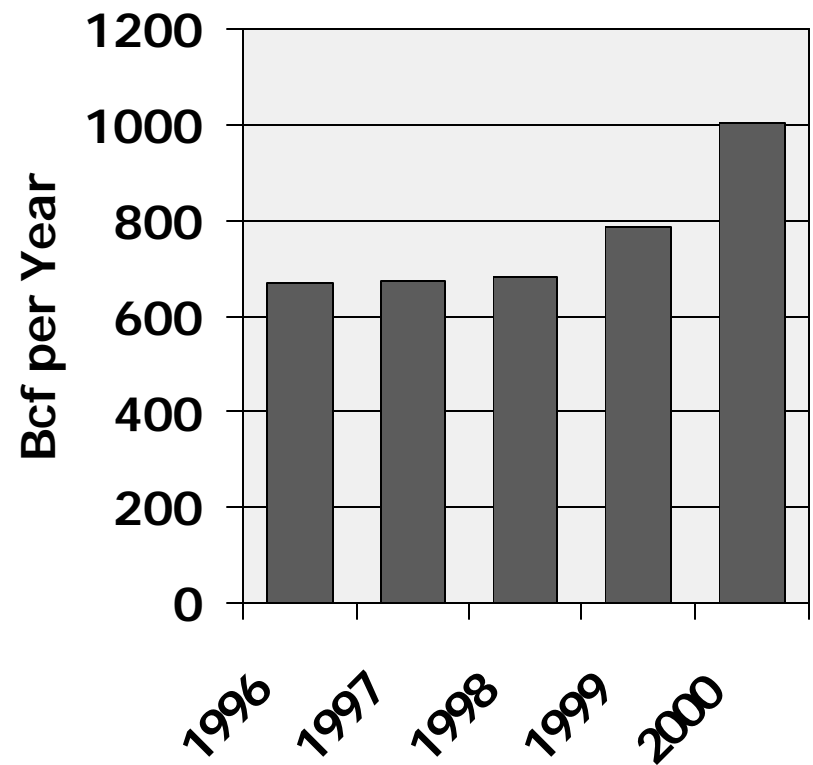
Telephone: 202-502-8371

Toll-free 1-866-208-3676

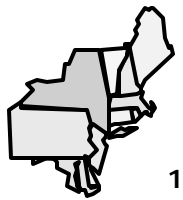
Email: public.referenceroom@ferc.gov

Natural Gas Imports from Canada to the Northeast

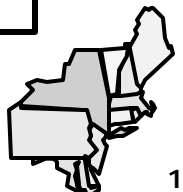
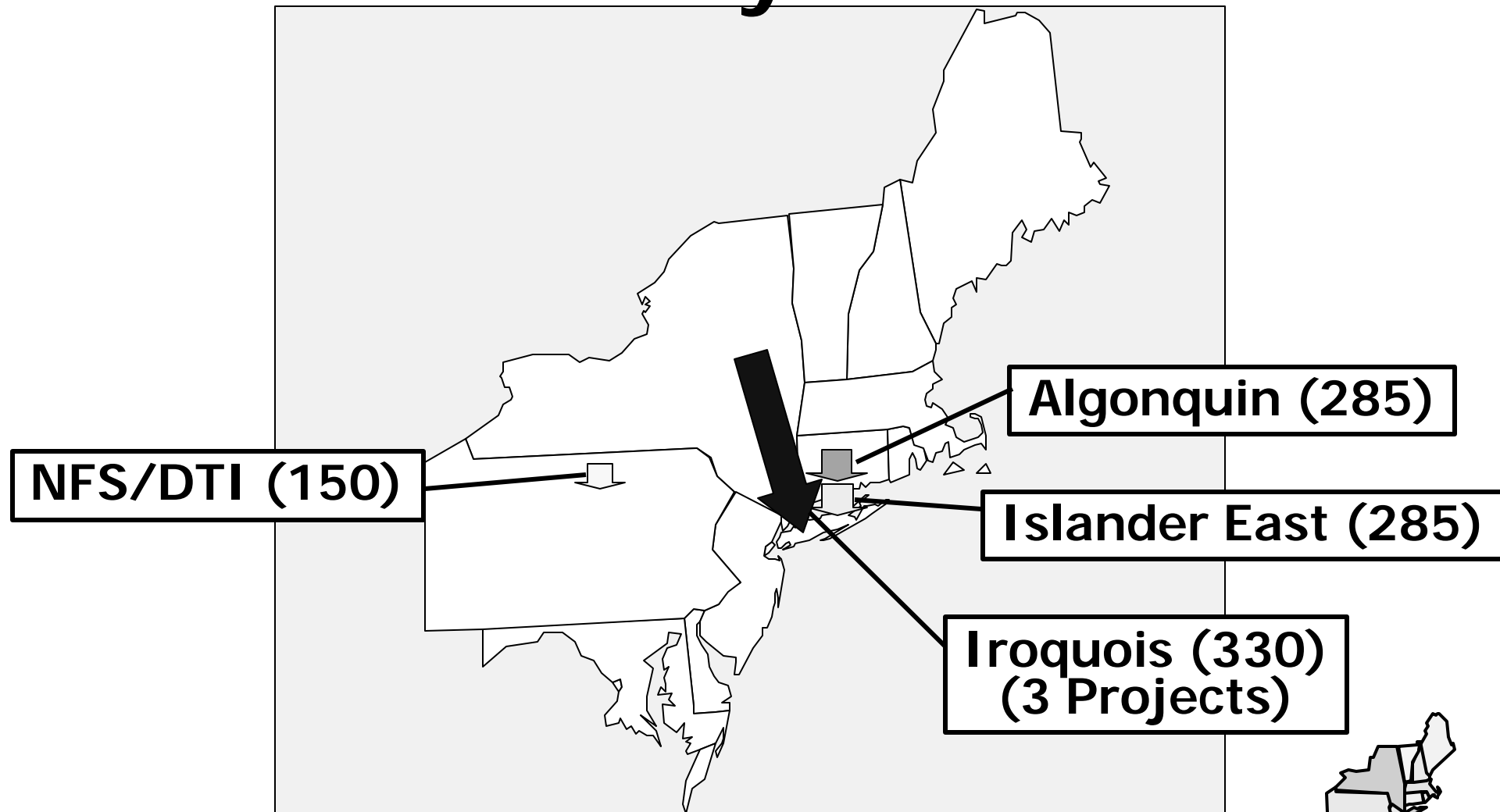
- Imports from Canada to the Northeast grew by 50% from 1996 to 2000.
- The Northeast's share of all Canadian imports to the US grew from 23.3% in 1996 to 28.3% in 2000.



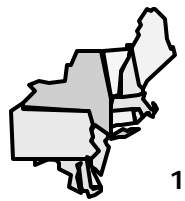
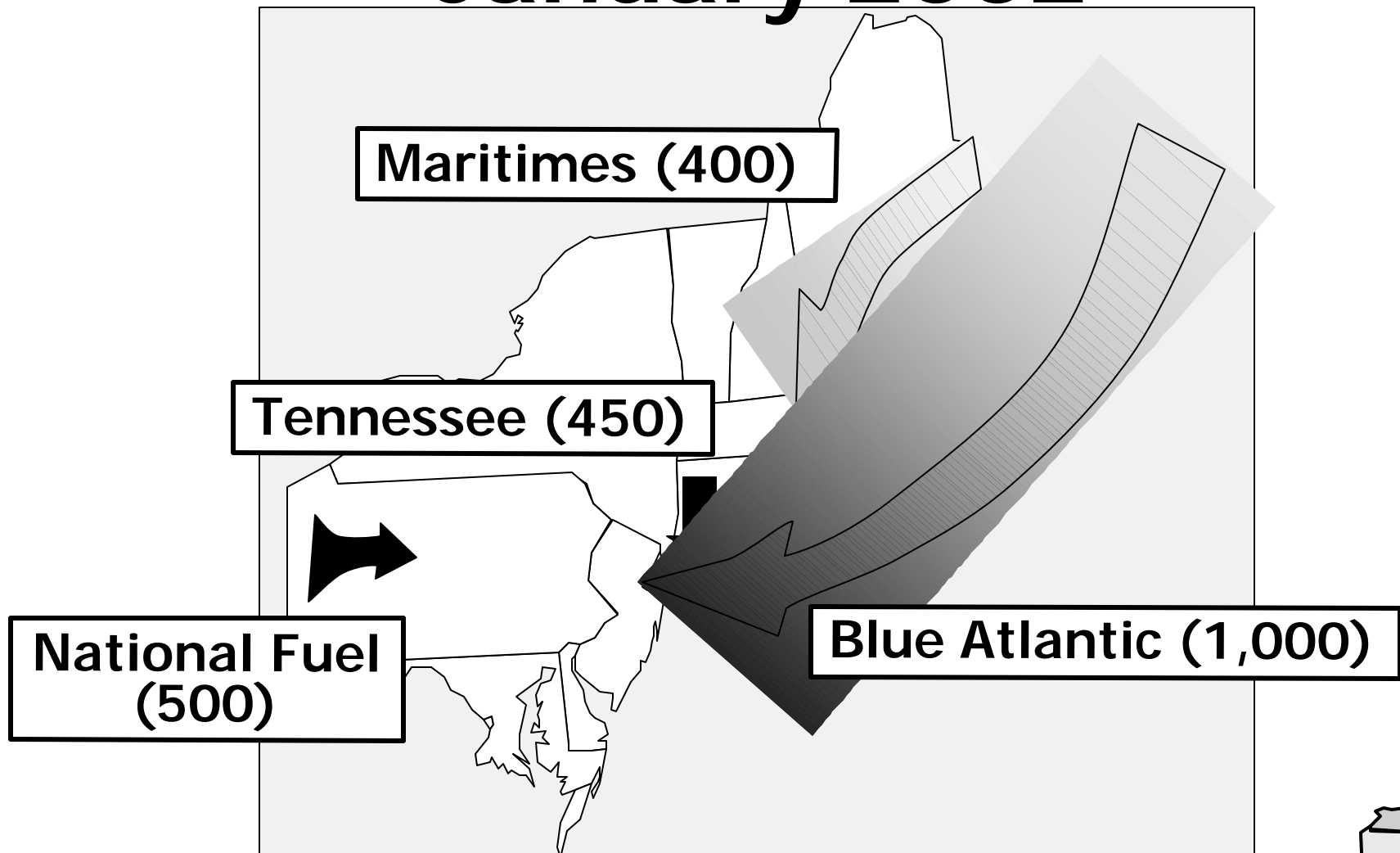
Source: EIA



Major Pipeline Projects Pending (MMcf/d) January 2002

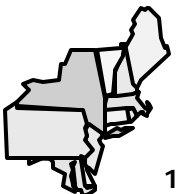


Major Pipeline Projects On The Horizon (MMcf/d) January 2002

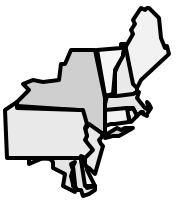


Gas Storage in the Northeast

- In 2000, there were 81 active fields in the Northeast – 58 in Pennsylvania, 22 in New York, and 1 in Maryland.
- The total capacity of these storage fields is 922 Bcf.
- This represents 11.2% of the US storage capacity.



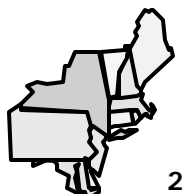
HYDROELECTRIC INFRASTRUCTURE



Northeast Hydroelectric Sites

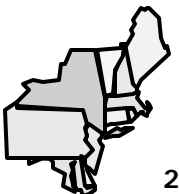


Source: FERC

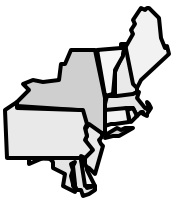


Northeast Hydroelectric

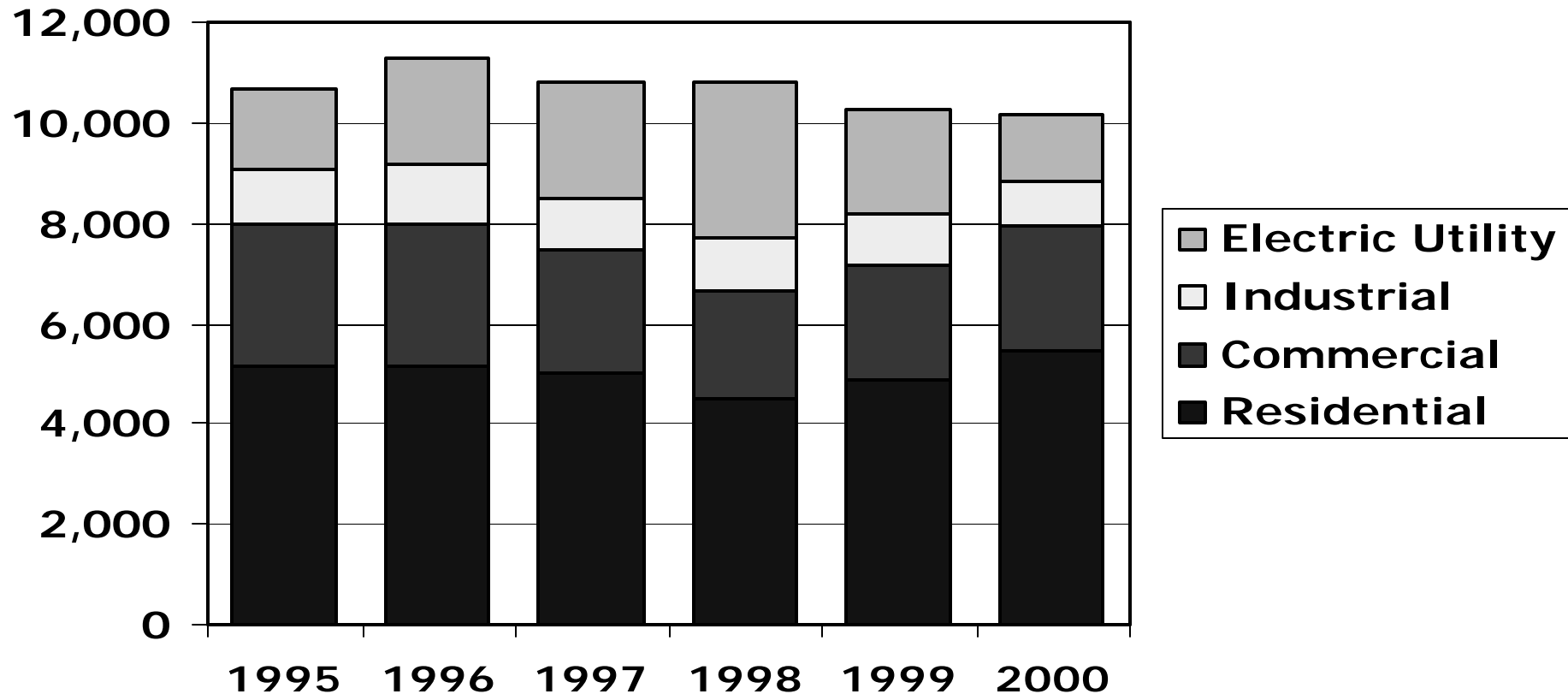
- There are 529 FERC-regulated hydroelectric projects in the Northeast with total capacity of 14,343 MW.
- Preliminary permits have been issued to determine the feasibility of installing an additional 232 MW at 35 Northeast sites.
- In 1995 electric generation from Northeast hydro was 29 TWh and 24.1 TWh in 2000.
- In 2000, 5% of the Northeast's generation output was fueled by hydro.



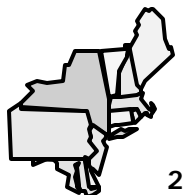
OIL



Fuel Oil Consumption by Sector (in million gallons)



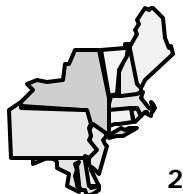
Source: EIA



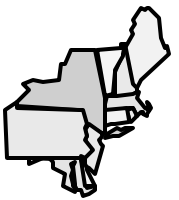
Refinery Capacity and Deliverability in the Northeast

- 10 refineries in Delaware, New Jersey and Pennsylvania as of January 1, 2001
- Operating capacity of 1.47 million barrels per calendar day.
- Two crude oil Pipelines located in New Hampshire, Maine, and Vermont.
- Delivered 179.7 million barrels of crude oil in 2000.
- Five products pipelines located in Connecticut, Massachusetts, Rhode Island, Pennsylvania, New York, and New Jersey
- Delivered 1.5 billion barrels of products and 475.4 million barrels of crude oil in 2000.

Sources: FERC; EIA

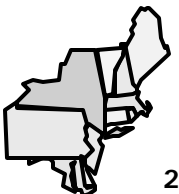


COAL



Coal Production and Consumption

- Pennsylvania and, to a lesser extent, Maryland are the only coal-producing states in the Northeast.
- Coal production in the Northeast totaled over 79 million short tons, or about 7.2% of total US production.
- Northeast coal consumption has declined greatly in the last five years – from 91.3 million short tons in 1996 to 45.3 million short tons in 2000.



Coal for Electricity

- Electric generation accounted for 85.7% of the coal consumed in the Northeast in 2000.
- 35.6% of electricity generated in the Northeast in 2000 came from coal.
- The Northeast also consumed coal via transmission line imports from Kentucky, Tennessee, Ohio, and other coal-producing states.

